

Amendments to the Claims:

This listing of the claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

Claims 1-17 (Cancelled)

18 (New): A fuel cell system comprising fuel cells in each of which an electrolyte membrane is sandwiched between an anode and cathode and performing power generation by providing a fuel gas to the anode while providing an oxidant gas to the cathode, comprising: a moisture-adjusted gas generating mechanism which generates moisture-adjusted gas; a temperature sensor which detects either of an outside air temperature or a temperature of the fuel cells; and

a programmable controller programmed to:

detect either of the outside air temperature or a temperature of the fuel cells in a predetermined timing after the power generation is halted;

determine if either of the outside air temperature or the temperature of the fuel cells in the predetermined timing after the power generation is halted is in a predetermined temperature region which is set between a reference temperature below which freezing in the fuel cells is expected and a freeing point; and

control the moisture-adjusted gas generating mechanism to supply the moisture-adjusted gas to at least one of the anode and cathode, when the outside air temperature or the temperature of the fuel cells in the predetermined timing after the power generation is

halted is in a predetermined temperature region, so as to remove surplus moisture in the fuel cells and maintain an appropriate wet condition of the fuel cells.

19 (New): The fuel cell system as defined in claim 18, wherein the temperature sensor is a fuel cell temperature sensor which detects the temperature of the fuel cells and the programmable controller is further programmed to control the moisture-adjusted gas generating mechanism to adjust a wet condition of the moisture-adjusted gas in accordance with the temperature of the fuel cells.

20 (New): The fuel cell system as defined in claim 18, further comprising a sensor which detects a wet condition of the fuel cells, wherein the programmable controller is further programmed to determine if the wet condition of the fuel cells is wetter than a predetermined wet condition or drier than the predetermined wet condition, control the moisture-adjusted gas generating mechanism to adjust a relative humidity of the moisture-adjusted gas to be wetter when the wet condition of the fuel cells is drier than the predetermined wet condition, control the moisture-adjusted gas generating mechanism to adjust the relative humidity of the moisture-adjusted gas to be drier when the wet condition of the fuel cells is wetter than the predetermined wet condition, and control the moisture-adjusted gas generating mechanism to stop supplying the moisture-adjusted gas when the wet condition of the fuel cells is equal to the predetermined wet condition.

21 (New): The fuel cell system as defined in claim 18, wherein a relative humidity of the moisture adjusted gas is set within a range from 15 percent to 95 percent.

22 (New): The fuel cell system as defined in claim 18, wherein the programmable controller is programmed to control the moisture-adjusted gas generating mechanism to supply the moisture-adjusted gas to the anode and the cathode, while controlling the moisture-adjusted gas generating mechanism to cause a relative humidity of the moisture-adjusted gas supplied to the anode to be higher than a relative humidity of the moisture-adjusted gas supplied to the cathode.

23 (New): The fuel cell system as defined in claim 20, wherein the sensor which detects the wet condition of the fuel cells is constituted by a sensor which detects an electric resistance of at least one of the fuel cells and the programmable controller is further programmed to control the moisture-adjusted gas generating mechanism to adjust the relative humidity of the moisture-adjusted gas to be wetter when the electric resistance is greater than a predetermined resistance, control the moisture-adjusted gas generating mechanism to adjust the relative humidity of the moisture-adjusted gas to be drier when the electric resistance is smaller than the predetermined resistance, and control the moisture-adjusted gas generating mechanism to stop supplying the moisture-adjusted gas when the electric resistance is equal to the predetermined resistance.

24 (New): The fuel cell system as defined in claim 20, wherein the fuel cells comprise a moisture adjusted gas inlet and a moisture adjusted gas outlet, and the sensor which detects the wet condition of the fuel cells comprises at least a sensor which detects a wet condition of a fuel cell located in the vicinity of the moisture adjusted gas inlet and a sensor which detects a wet condition of a fuel cell located in the vicinity of the moisture adjusted gas outlet.